

Perspective on

# PAEs

Recently, widespread attention has been focused on the possibility that the commonly used plasticizers—phthalic acid esters (PAEs)—may present hazards to human health. Cause for concern was initiated by the documentation that PAEs were readily extracted into blood from plastic storage bags and other medical devices. This led to the fear that the human population would be continually exposed to PAEs through the vast array of plastic products that permeate our modern life. Major uses of PAEs include building and construction products, automobile and home furnishings, clothing, food coverings, and medical products.

Scientists in the field of toxicology, analytical chemistry, biochemistry, ecology, pharmacology, and other disciplines have investigated particular problems—both potential and actual—regarding PAEs in our environment. The scientific world generally agrees that PAEs have not been shown to induce chemical disease. However, prior costly environmental health lessons remind us not to wait for obvious signs of toxicity before

investigating the potential hazards of any environmental chemical. It is the responsibility of industry, government, and the university community—working together as an effective coalition—to study carefully the potential hazards of environmental chemicals to human health. A coalition of this nature is required to assess PAEs according to the benefit vs. risk equation.

With these thoughts in mind a conference, sponsored by NIEHS, was organized to present ongoing research concerning PAEs in our environment. The conference was held Sept. 6-7 at the Carolina Hotel in Pinehurst, North Carolina. Presentations included aspects of industrial use, analytic methodology, how PAEs reach and distribute within our environment, biotransformation, pharmacokinetics, toxicology, effects on aquatic eco-systems, and suggested areas for future research.

The reports that follow appear substantially as they were presented at the Pinehurst conference. Your comments on them are indeed welcome.